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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,670	03/29/2001	Seiji Takeuchi	862.C2168	3161

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EXAMINER

KOSOWSKI, ALEXANDER J

ART UNIT PAPER NUMBER

2125

DATE MAILED: 04/14/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/819,670

Applicant(s)

TAKEUCHI ET AL.

Examiner

Alexander J Kosowski

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/29/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 42-48, 50-52 and 54-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-48, 51, 52, 56 and 57 is/are allowed.
- 6) ☒ Claim(s) 50, 54 and 55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

1) Claims 42-48, 50-52 and new claims 54-57 are presented for examination in light of the amendment filed 1/29/04.

***Allowable Subject Matter***

2) Claims 42-48, 51-52 and 56-57 are allowed.

3) The following is a statement of reasons for the indication of allowable subject matter:

Referring to claims 42-48, 51-52 and 56-57, the claims are allowable for the reasons cited by applicant in the "Remarks" section of the amendment filed 1/29/04.

***Claim Objections***

4) The claim objections from the last office action are withdrawn in light of the amendment filed 1/29/04.

***Claim Rejections - 35 USC § 112***

5) The 112 claim rejections from the last office action are withdrawn in light of the amendment filed 1/29/04.

***Claim Rejections - 35 USC § 103***

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7) Claims 50 and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suenega, further in view of Iwai (U.S. Pat 5,829,939).

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Referring to claim 50, Suenega teaches a stocker for stocking substrates whereby atmosphere controllers are used to control the atmospheres that the wafers are transported through and processed within (col. 18 lines 5-38), whereby a sealing member, having a stocking station within, for storing the substrates on said stocking station is controlled to a second atmosphere (col. 19 lines 12-39). However, Suenega does not explicitly teach that the substrates are covered with a substrate cover, nor that an atmosphere controller controls an atmosphere of the interior of the sealing member of the substrate stored by said stocking station to a first atmosphere.

Iwai teaches a processing system whereby substrates which are covered with substrate covers are transported in and out of treatment apparatuses and whereby the interior of said substrate cover is controlled to a first atmosphere (col. 11 line 58 through col. 12 line 20).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize a substrate cover to cover the substrates and to control the interior of the substrate cover of the substrate stored by said docking station to a second atmosphere in the invention taught by Suenega since this would allow the cassette carrying the wafers to be filled with clean air at a very high cleanliness level to create a non-oxygen atmosphere (Iwai, col. 11 lines 64-67) which would allow the cassette containing the wafers to be conveyed through a working region which may be a lower cleanliness level (Iwai, col. 12 lines 2-5).

Referring to claim 54, Suenega teaches the stocker above. However, Suenega does not explicitly teach that a control of said first atmosphere controller and a control of said second atmosphere controller are performed simultaneously.

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However, examiner notes that it would have been obvious to one skilled in the art at the time the invention was made to simultaneously control the first and second atmospheres since this would allow both atmospheres to comprise air of identical cleanliness.

Referring to claim 55, Suenega teaches an exposure apparatus that transfers a pattern on a reticle to a wafer (Abstract, lines 4-6), whereby an F2 excimer laser may be used (col. 17 lines 13-15). However, Suenega does not explicitly teach that an oxygen concentration of the first atmosphere is equal to or less than 5 ppm, and an oxygen concentration of the second atmosphere is equal to or less than 50 ppm.

However, examiner notes that it would have been obvious to one skilled in the art at the time the invention was made to have the oxygen concentration of the first atmosphere less than 5 ppm since Suenega teaches that it is necessary to reduce oxygen as much as possible since oxygen is known to absorb F2 laser wavelengths (Suenega, col. 1 lines 12-47). It is also noted that it would have been obvious to keep oxygen concentration of the second atmosphere below 50 ppm since this is necessary to minimize contamination of the sealed chambers.

### ***Response to Arguments***

8) Referring to claim 50, Applicant argues that Suenega does not “teach or suggest at least the features of...performing atmospheric control for both an interior of a substrate cover and a space between an interior of a sealing member and an exterior of a substrate cover” (Pages 13-14 of Amendment filed 1/29/04). In addition, Applicant argues that Iwai teaches that the “stocking station of a wafer W is positioned at an exterior of a sealing member, and not internally of the sealing member as in the present invention...” (Page 13 of Amendment filed 1/29/04).

In response, examiner notes Suenega is used to show atmospheric control of a space of a sealing member containing a substrate and a stocker, while the Iwai patent is used to teach controlling an atmosphere of a substrate having a substrate cover. Applicant's arguments are against the references individually, while the examiners rejection is based upon a 103 of two references. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In addition, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

### ***Conclusion***

9) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander J Kosowski whose telephone number is 703-305-3958.

The examiner can normally be reached on Monday through Friday, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703-308-0538. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. In addition, the examiner's RightFAX number is 703-746-8370.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Alexander J. Kosowski  
Patent Examiner  
Art Unit 2125



LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100